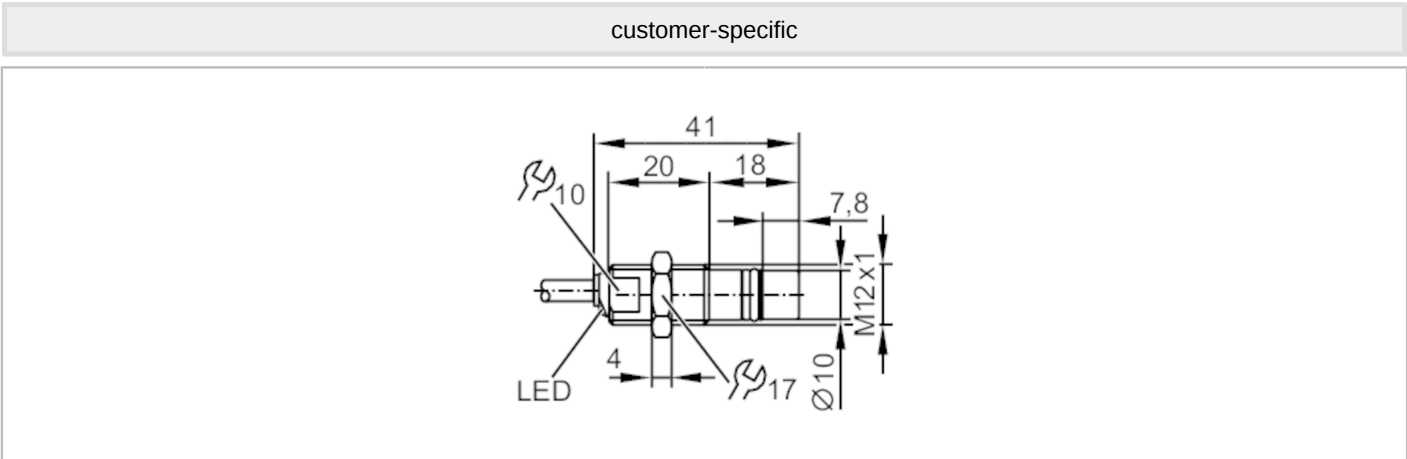




Cylinder sensor

MFB3002BBPKG/B/500/0,12M/ZH/DT



Product characteristics		
Electrical design		PNP
Output function		normally open
Sensing range	[mm]	1.8
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 41
Application		
Special feature		Full-metal housing
Application		hydraulic cylinders
Media		detects ferrous metals
Min. bursting pressure	[bar]	2000
Min. bursting pressure	[MPa]	200
Pressure rating	[bar]	500
Pressure rating	[MPa]	50
Electrical data		
Operating voltage	[V]	10...36 DC
Current consumption	[mA]	< 23
Protection class		III
Reverse polarity protection		yes
Outputs		
Electrical design		PNP
Output function		normally open
Max. voltage drop switching output DC	[V]	1.6
Max. leakage current	[mA]	0.1
Permanent current rating of switching output DC	[mA]	200
Switching frequency DC	[Hz]	1000
Short-circuit protection		yes
Type of short-circuit protection		pulsed

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Cylinder sensor

MFH3002BBPKG/B/500/0,12M/ZH/DT

Overload protection	yes	
Detection zone		
Sensing range	[mm]	1.8
Accuracy / deviations		
Hysteresis	[% of Sr]	< 15
Switch point drift	[% of Sr]	10
Repeatability	[% of Sr]	10
Operating conditions		
Pressure peak	[bar]	1000
Ambient temperature	[°C]	-25...85
Protection	IP 65; IP 68; IP 69K	
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
	DIN ISO 11452-5	100 V/m
Vibration resistance	EN 60068-2-6 Fc	20 g 50 sweep cycles, 1 octave per minute, in 3 axes / 10...3000 Hz -20...50 °C
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes / -40...85 °C
Continuous shock resistance	EN 60068-2-27 Ea	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes / -20...50 °C
Mechanical data		
Weight	[g]	47.3
Housing	threaded type	
Mounting	flush mountable	
Dimensions	[mm]	M12 x 1 / L = 41
Thread designation	M12 x 1	
Materials	housing: stainless steel; O-ring: FKM; supporting ring: PTFE	
Min. pressure cycles	10 million	
Tightening torque	[Nm]	< 25
Full-metal housing	yes	
Displays / operating elements		
Display	switching status	1 x LED, yellow
Accessories		
Items supplied	lock nuts: 1	
Remarks		
Notes	customer-specific	
Pack quantity	1 pcs.	

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Cylinder sensor

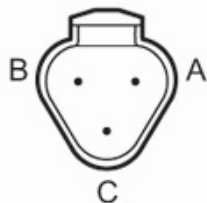
MFB3002BBPKG/B/500/0,12M/ZH/DT

Electrical connection

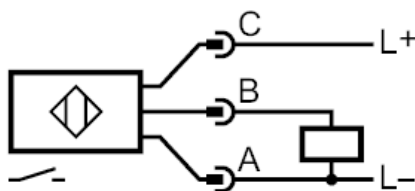
Cable: 0.125 m, PUR, Ø 4.9 mm; 3 x 0.5 mm²

Electrical connection - plug

Connector: 1 x DEUTSCH connector (DT04-3P-CE02); potted



Connection



Diagrams and graphs

